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BUSHNELL et al.(10) **Pub. No.: US 2020/0033815 A1**(43) **Pub. Date: Jan. 30, 2020**(54) **WATCH WITH OPTICAL SENSOR FOR
USER INPUT****G04G 17/04** (2006.01)**G04G 11/00** (2006.01)(71) Applicant: **Apple Inc.**, Cupertino, CA (US)(52) **U.S. Cl.**CPC **G04G 21/08** (2013.01); **G04G 11/00**
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21/06 (2013.01)(72) Inventors: **Tyler S. BUSHNELL**, Mountain View,
CA (US); **Sameer PANDYA**,
Sunnyvale, CA (US); **Steven P.**
CARDINALI, Campbell, CA (US)

(57)

ABSTRACT

A watch can include a user input component that employs an optical sensor to receive input from a user. The input components provide an ability for a user to interact with the watch in a manner similar to how a user would interact with a crown that is rotatable and/or translatable. The user can provide motions and gestures near the input component that the input component can detect and interpret and user inputs to control an aspect of the watch. The motions and gestures provided by the user can be directly detected with optical systems of the input component, so that the number of moving parts are reduced and space within the watch is more efficiently utilized. While providing these benefits, the input component provides a user experience that simulates user interactions with a crown that is rotatable and/or translatable.

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